

## ABSTRACT OF THE DISCLOSURE

An apparatus for detecting currents in a three-phase power transmission system includes a first detection circuit electrically coupled to a first phase of the three-phase transmission system, a second detection circuit electrically coupled to a second phase of the three-phase transmission system different than the first phase, and an event output switch electrically coupled to the first detection circuit and the second detection circuit and configured to actuate when a subsynchronous current on at least one of the first phase and the second phase exceeds a pre-selected subsynchronous current setpoint.